

Appendix A: National Ambient Air Quality Standards and FHWA Noise Abatement Criteria

A.1 National Ambient Air Quality Standards

Table A.1-1. National Ambient Air Quality Standards (NAAQS)

Pollutant	National (EPA) Standard	
	Primary	Secondary
Particulate Matter (PM₁₀)		
Annual Arithmetic Mean	50 µg/m ³	50 µg/m ³
24-Hour Average	150 µg/m ³	150 µg/m ³
Particulate Matter (PM_{2.5})		
Annual Arithmetic Mean	15 µg/m ³	15 µg/m ³
24-Hour Average	65 µg/m ³	65 µg/m ³
Lead (Pb)		
Quarterly Average	1.5 µg/m ³	1.5 µg/m ³
Sulfur Dioxide (SO₂)		
Annual Average	0.03 ppm	No Standard
24-Hour Average	0.14 ppm	No Standard
3-Hour Average	No Standard	0.50 ppm
Carbon Monoxide (CO)		
8-Hour Average	9 ppm	9 ppm
1-Hour Average	35 ppm	35 ppm
Ozone (O₃)		
8-Hour Average	0.08 ppm	0.08 ppm
1-Hour Average	0.12 ppm	0.12 ppm
Nitrogen Dioxide (NO₂)		
Annual Average	0.05 ppm	0.05 ppm
Annual standards are never to be exceeded. Short-term standards are not to be exceeded more than 1 day per calendar year unless noted otherwise.		
ppm = parts per million		
PM ₁₀ = particulate matter 10 microns in diameter or less		
PM _{2.5} = particulate matter 2.5 microns in diameter or less		
µg/m ³ = micrograms per cubic meter		
Source: EPA 2002		

A.2 FHWA Noise Abatement Criteria

Table A.2-1. Federal Highway Administration Noise Abatement Criteria

Activity Category	L _{eq} Noise Levels (dBA)	Description of Activity Category
A	57 (exterior)	Lands on which serenity and quiet are of extraordinary significance and serve an important public need, and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose
B	67 (exterior)	Picnic areas, recreation areas, playgrounds, active sports areas, parks, residences, motels, hotels, schools, churches, libraries, and hospitals
C	72 (exterior)	Developed lands, properties, or activities not included in Categories A or B above
D	—	Undeveloped lands
E	52 (interior)	Residences, motels, hotels, public meeting rooms, schools, churches, libraries, hospitals, and auditoriums

Source: FHWA 1982
